

Date: Wednesday, 18/06/2008 1:27:54 PM
 User: Julie Lecocq

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: FLANGE ASS'Y
Job Number	: 39935 -2		
Estimate Number	: 13032		
P.O. Number	:	Part Number	: D3651043
This Issue	: 18/06/2008 S.O. No. :	Drawing Number	: D3651 REV.B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 1/1 Type : SMALL /MED FAB	Drawing Revision	: B
Previous Run	: 37142	Material	:
Written By	:	Due Date	: 07/07/2008
Checked & Approved By	: JUL 08-6-18	Qty:	2 Um: Each
Comment	Est Rev:A New Issue 07-09-27 DD verified by: EC Est Rev:B ECN 1113P 08-01-22 DD Est Rev:C ecn1162 08-04-02 DD verified by: EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M304S26GA	304/316 0.018 SHEET
-----	-----------	---------------------



Comment: Qty.: 0.2573 sf(s)/Unit Total : 0.5145 sf(s)

304/316 SS sheet 26 ga (0.018" thick)

Batch: **108415** **HB 8-6-26**

(FOR D3651-7)

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET

1-Cut as per Dwg D3651 (D3651-7)

Dwg Rev: **B**

Prog Rev: **B**

HB 8-6-26

(3)

2-Deburr if necessary

IDENTIFY AS D3651-7

HB 8-6-26

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



HB 8-6-26

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

JUL 06-27 **(3)**

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 18/06/2008 1:27:54 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLANGE ASS'Y

Job Number: 39935

Part Number: D3651043

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

M304S26GA

304/316 0.018 SHEET



Comment: Qty.: 0.2573 sf(s)/Unit Total : 0.5145 sf(s)

304/316 SS sheet 26 ga (0.018" thick)

Batch: 108415 B 8-7-2

(FOR D3651-5)

6.0

WATER JET

FLOW WATER JET



Comment: FLOW WATER JET

1-Cut as per Dwg D3651 (D3651-5)

Dwg Rev: B

Prog Rev: B

2-Deburr if necessary

Identify as D3651-5

B 8-7-2

(3)

B 8-7-2

7.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

B 8-7-2

8.0

QC8

SECOND CHECK



Comment: SECOND CHECK

5 08/07/02 (x3)

9.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Form D3651-5 and D3651-7 as per Dwg D3651

1208-07-09 (3)

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5 08/07/02 (x3)

11.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld assembly as per dwg D3651

1208-07-10 (3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 18/06/2008 1:27:54 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLANGE ASS'Y

Job Number: 39935

Part Number: D3651043

Job Number:



Seq. #:	Machine Or Operation:	Description :
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12.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

08/07/14 (3)

13.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/07/14 (3)

14.0

D36513

Base



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

BASE B40193

FF 08-07-23

(2)

15.0

MS20427M33

Rivet



Comment: Qty.: 16.0000 Each(s)/Unit Total : 32.0000 Each(s)

Rivet

M106993

FF 08-07-23

(2)

16.0

MS210603K

Nut Plate



Comment: Qty.: 8.0000 Each(s)/Unit Total : 16.0000 Each(s)

Nut Plate

M105938

FF 08-07-23

(2)

17.0

CR3523401

RIVET



Comment: Qty.: 57.0000 Each(s)/Unit Total : 114.0000 Each(s)

RIVET

M106375

FF 08-07-23

(2)

18.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per dwg D3651

FF 08-07-23

(2)

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/07/14 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 18/06/2008 1:27:54 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLANGE ASS'Y

Job Number: 39935

Part Number: D3651043

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and stock

Location: GA

FF 08-07-29 (2)

21.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/07/30

Job Completion



MF 08-07-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

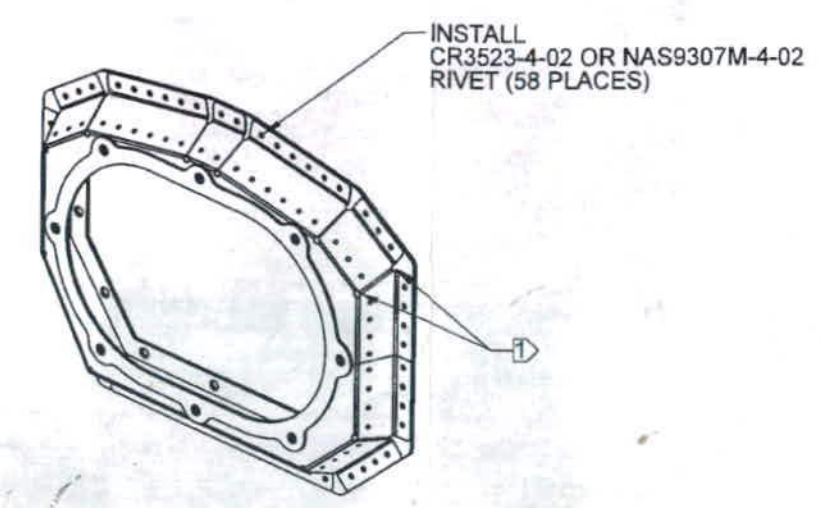
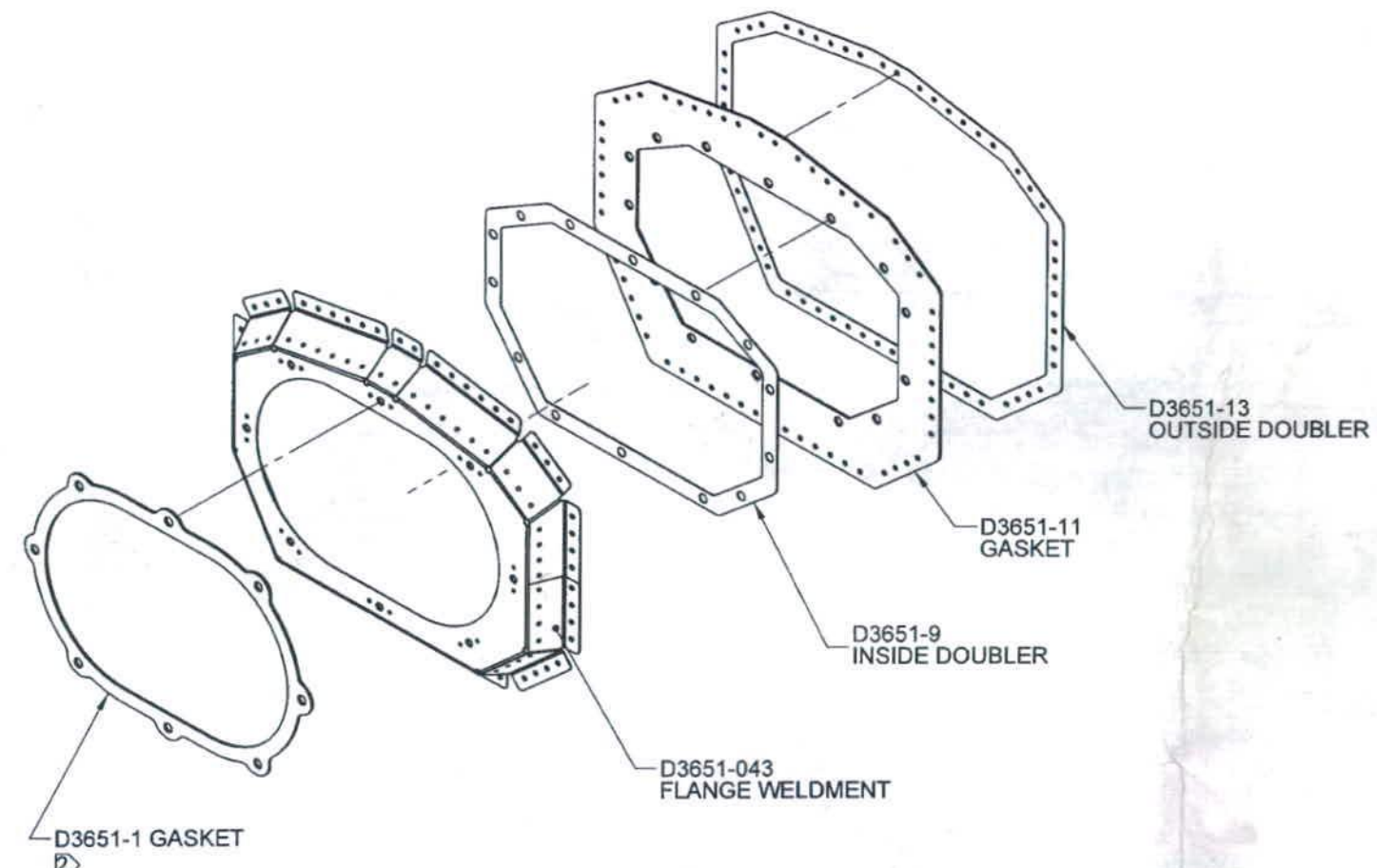
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1



PART LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3651-041	AFT BASE ASSEMBLY
1	D3651-043	FLANGE WELDMENT
1	D3651-1	GASKET
1	D3651-9	INSIDE DOUBLER
1	D3651-11	GASKET
1	D3651-13	OUTSIDE DOUBLER
58	CR3523-4-02 or NAS9307M-4-02	RIVET

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RELEASED
08.03.27/MP

D3651-041 AFT BASE ASSEMBLY

- D3651-041 NOTES:**
- 1) SEAL ALL MATING SURFACES AND GAPS USING PROSEAL 700 FIRE WALL SEALANT
 - 2) INSTALL D3651-1 USING 3M HIGH PERFORMANCE CONTACT ADHESIVE 1357
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 1.6 lbs

B	SHEET 1: GENERAL UPDATE SHEET 2: 8.74 WAS 8.50; 0.88 WAS 0.98; REMOVED ANGLE SHEETS 4, 5, 6, 8 & 9: GENERAL DIMENSIONAL UPDATE SHEET 7: 5.514 WAS 5.504	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	CE	DRAWING NO.	REV. B
MFG. APPR.	MP	D3651	SHEET 1 OF 9
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DE APPR.		AFT BASE ASSEMBLY	1:4
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TRANSFER DRILL $\varnothing 0.129$ (#30 DRILL)
FROM D3651-5/-7 TO D3651-3
INSTALL CR3523-4-02 OR NAS9307M-4-02
RIVETS (57)

MS21060-3K NUTPLATE (1)
MS20427M3-3 RIVET (2)
(8 PLACES)

GTAW
GRIND FLAT TO
CLEAR FASTENERS
(2 PLACES)

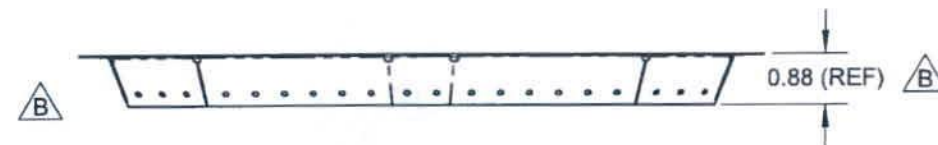
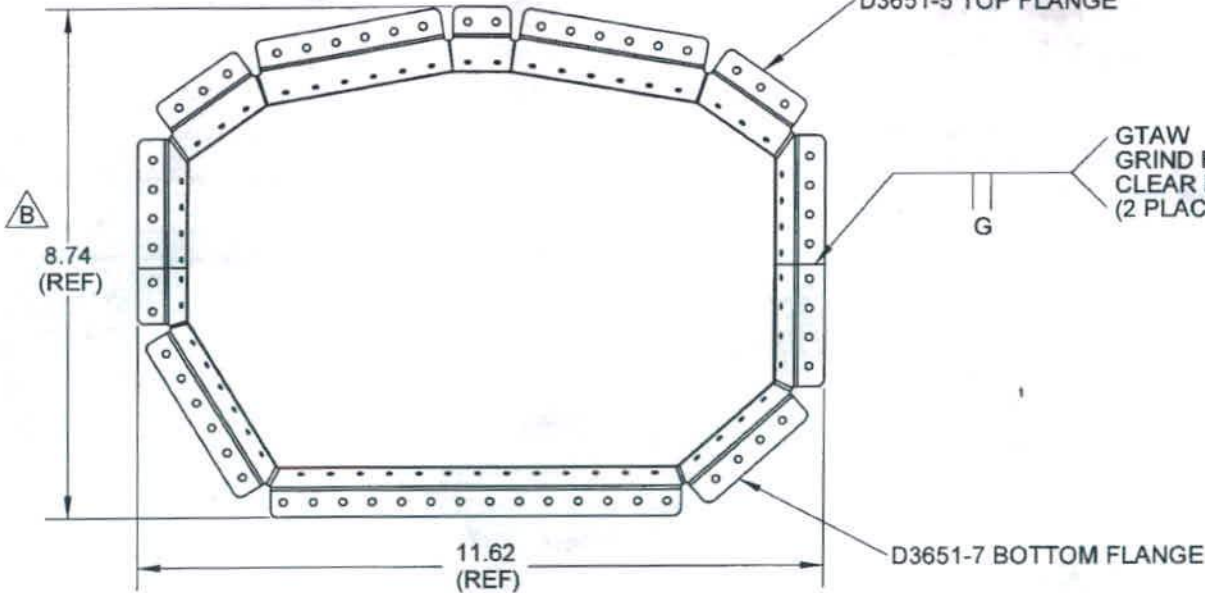
D3651-5 TOP FLANGE

D3651-7 BOTTOM FLANGE

D3651-5
TOP FLANGE
(REF)

D3651-7
BOTTOM FLANGE
(REF)

D3651-3
BASE



D3651-043 FLANGE WELDMENT

D3651-043 NOTES:

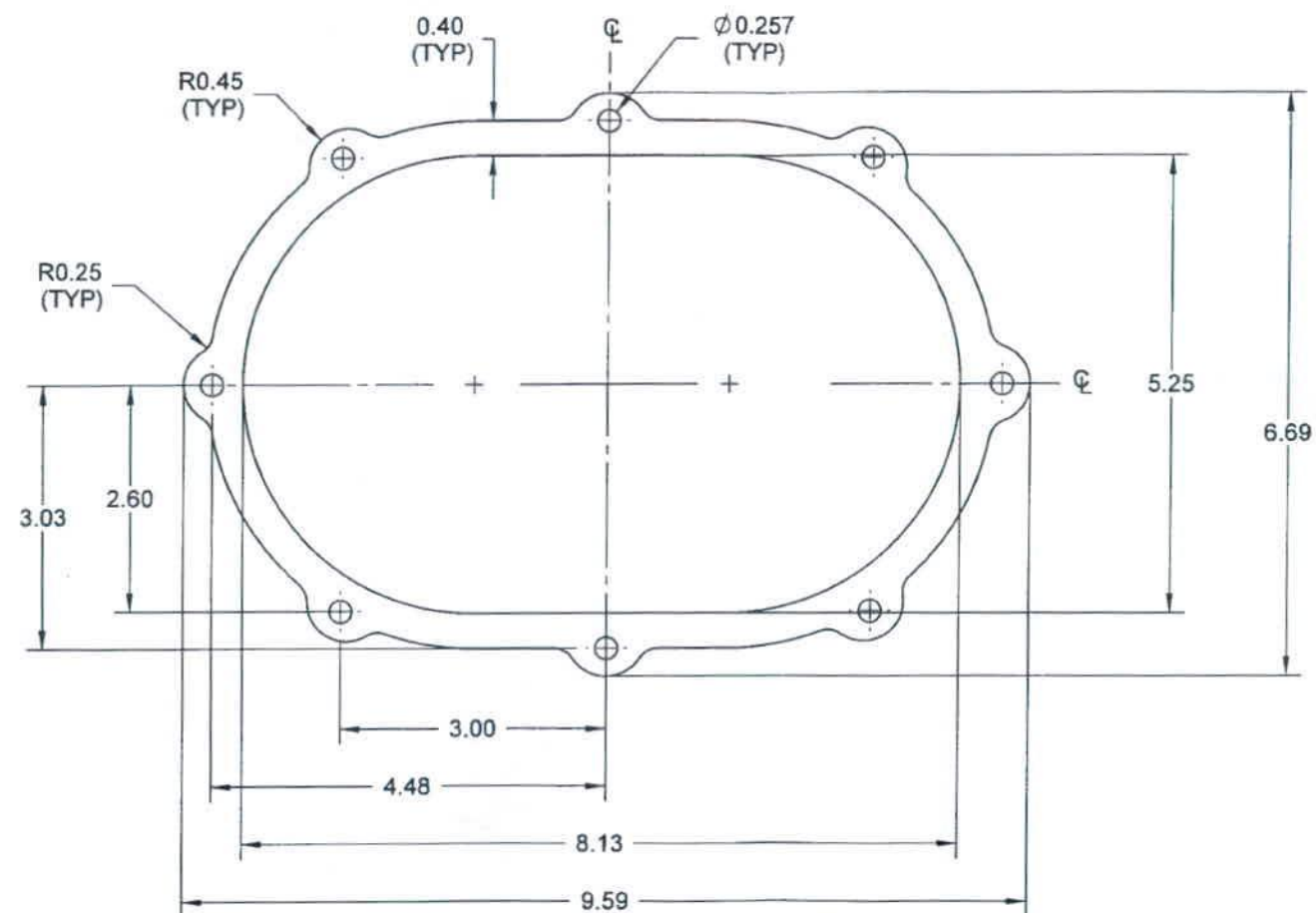
- 1) WELD PER QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.76 lbs

QTY -043	PART NUMBER	DESCRIPTION
X	D3651-043	FLANGE WELDMENT
1	D3651-3	BASE
1	D3651-5	TOP FLANGE
1	D3651-7	BOTTOM FLANGE
16	MS20427M3-3	RIVET
8	MS21060-3K	NUTPLATE
57	CR3523-4-02 or NA9307M-4-02	RIVET

RELEASED
08.03.27

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MFG. APPR.	ME	D3651	SHEET 2 OF 9
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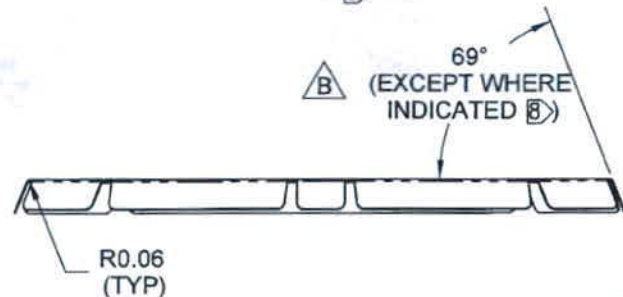
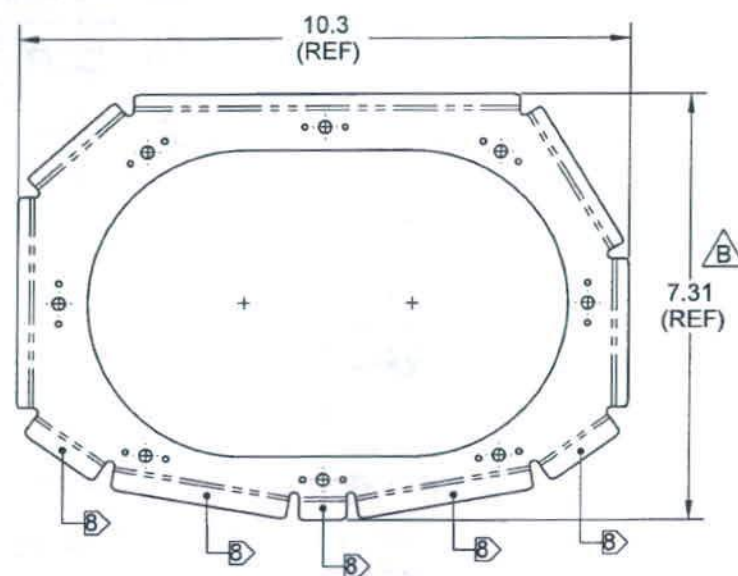
D3651-1 GASKET

NOTES:

- 1) MATERIAL: THERMO-CHEM P/N G-89, (REF. 0.060 THICK)
POSSIBLE SUPPLIER: A.R. THOMSON GROUP
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) PART IS SYMMETRIC ABOUT CL
- 8) WEIGHT: 0.09 lbs

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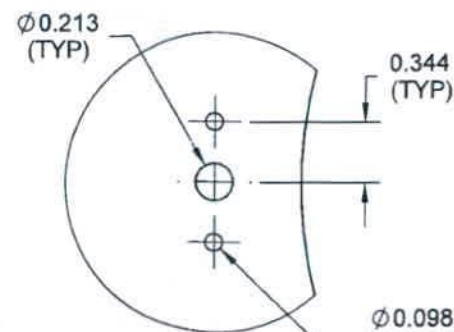
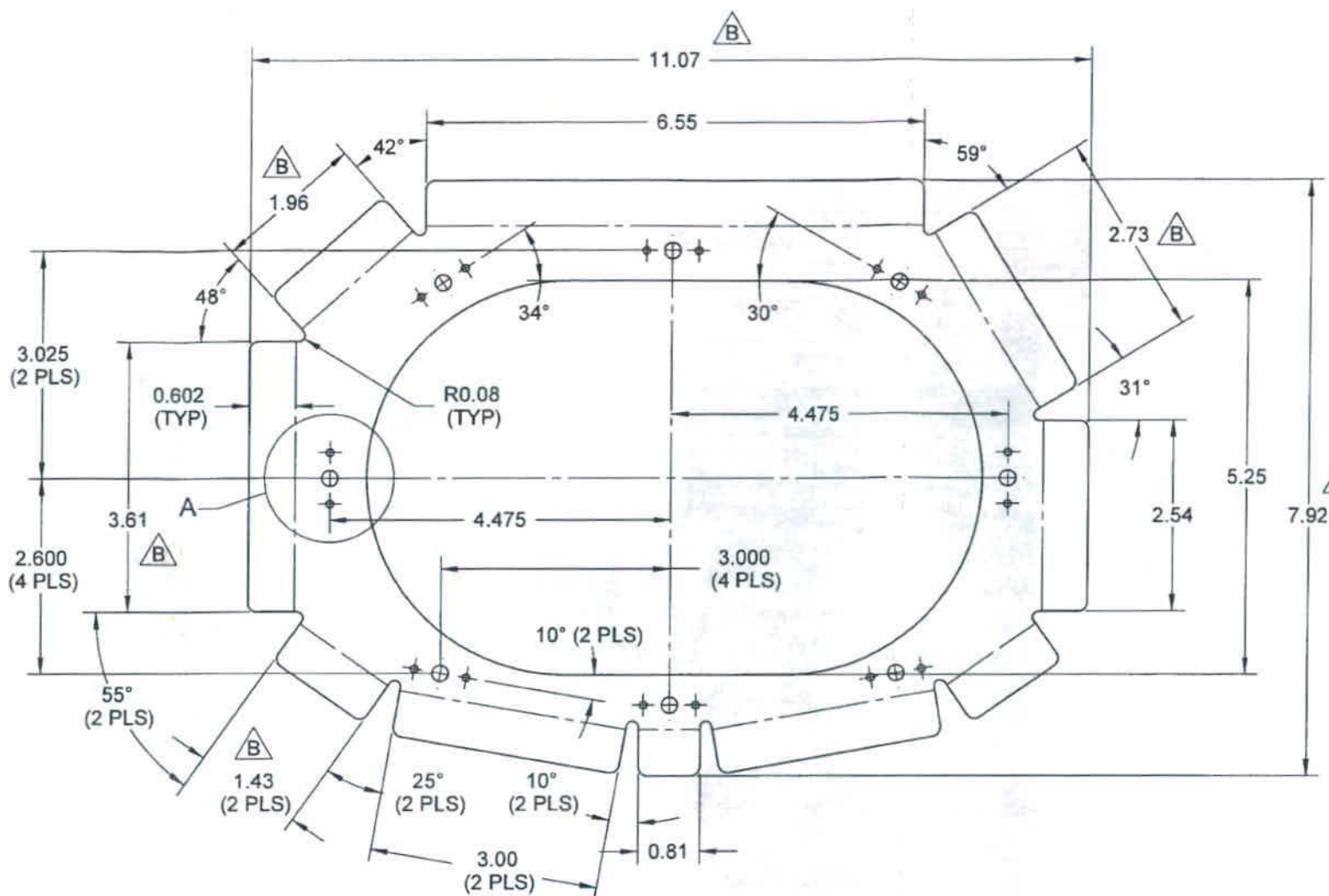
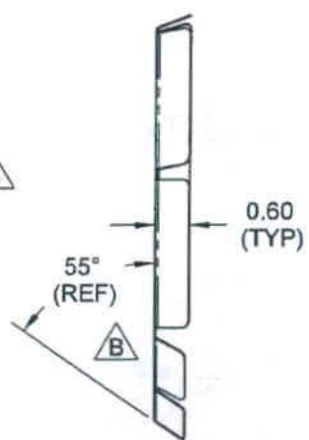
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D3651-3 BASE
(MAKE FROM D3651-3F FLAT PATTERN)

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.27 lbs
- 8) BEND TO 55° WHERE INDICATED



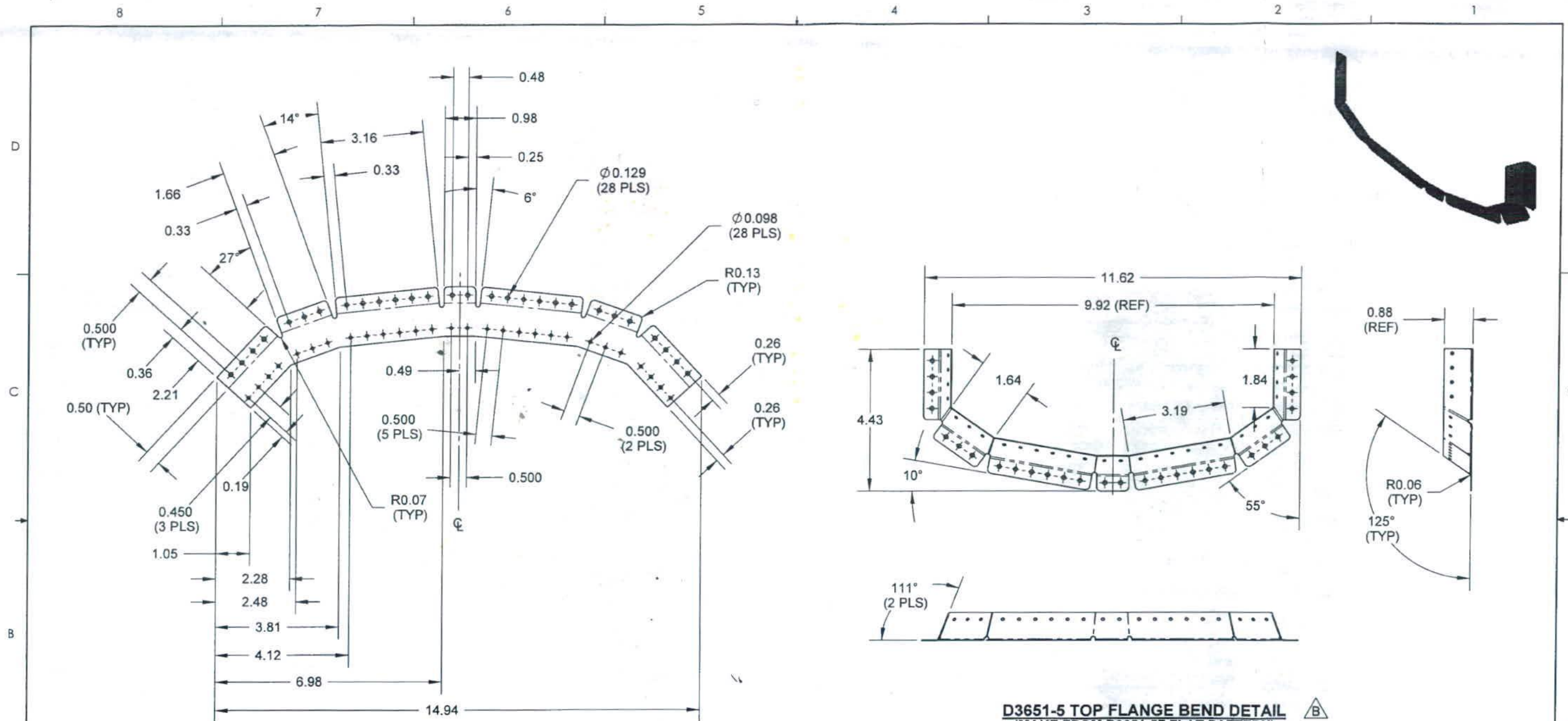
Ø0.098 (TYP)
DIMPLE HOLES
FOR MS20427M3
RIVET

DETAIL A

D3651-3F FLAT PATTERN

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
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MFG. APPR.		D3651	SHEET 4 OF 5
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D3651-5F FLAT PATTERN

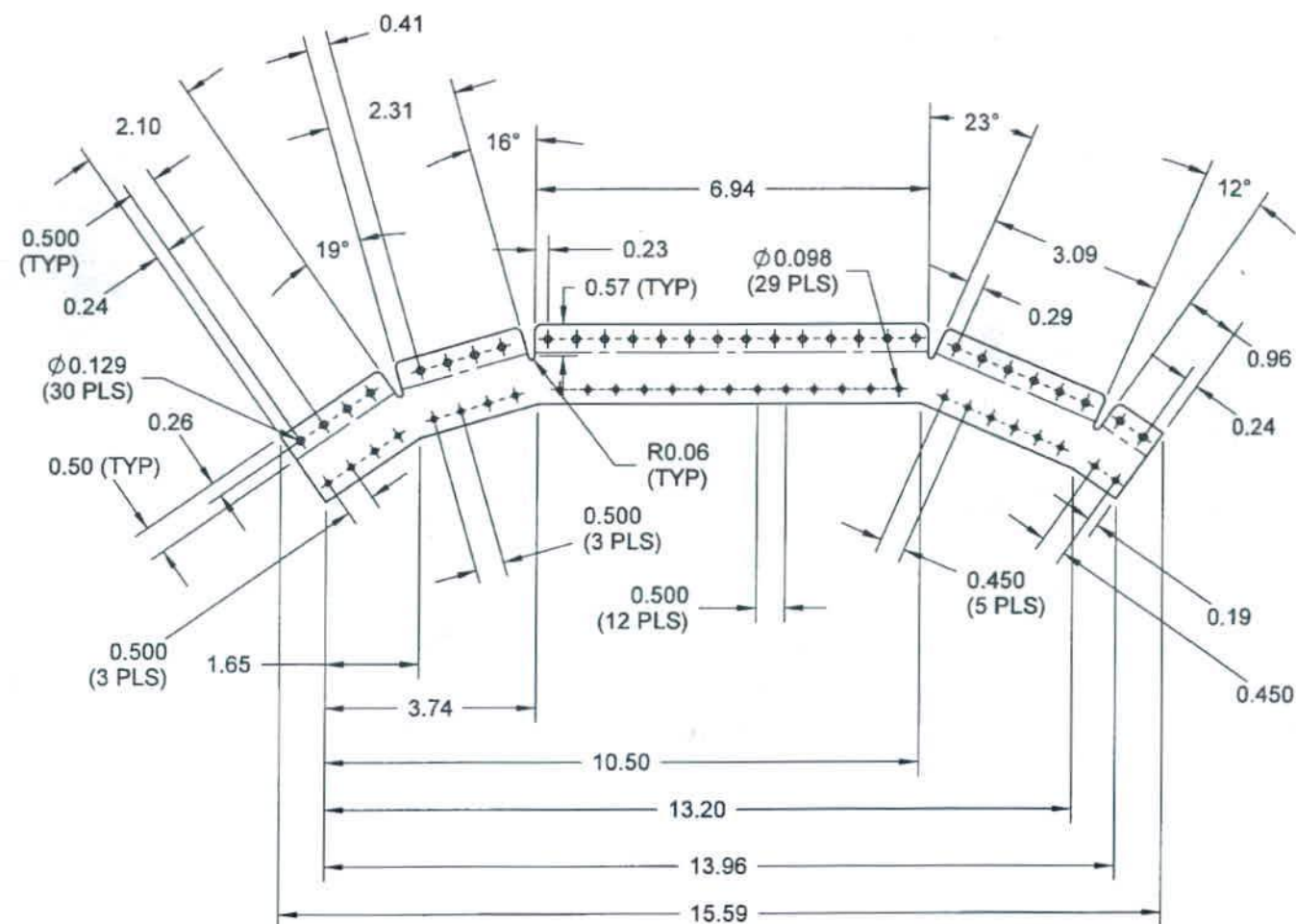
D3651-5 TOP FLANGE BEND DETAIL
(MAKE FROM D3651-5F FLAT PATTERN)

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

DESIGN	RF	DART AEROSPACE LTD	
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MFG. APPR.		D3651	SHEET 5 OF 9
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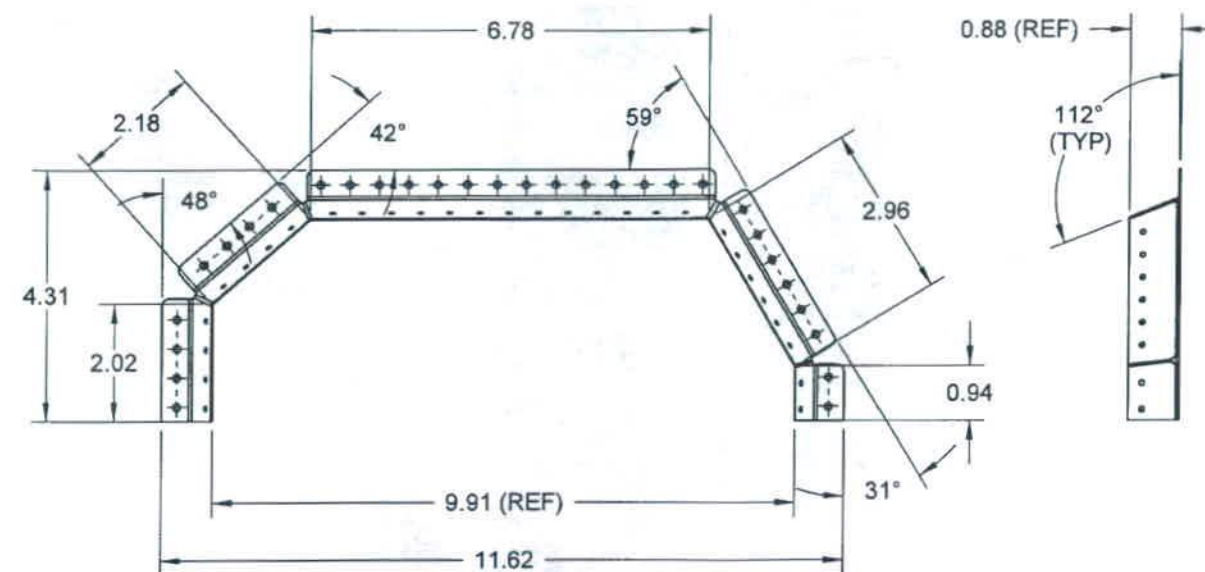
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D3651-7F FLAT PATTERN B

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

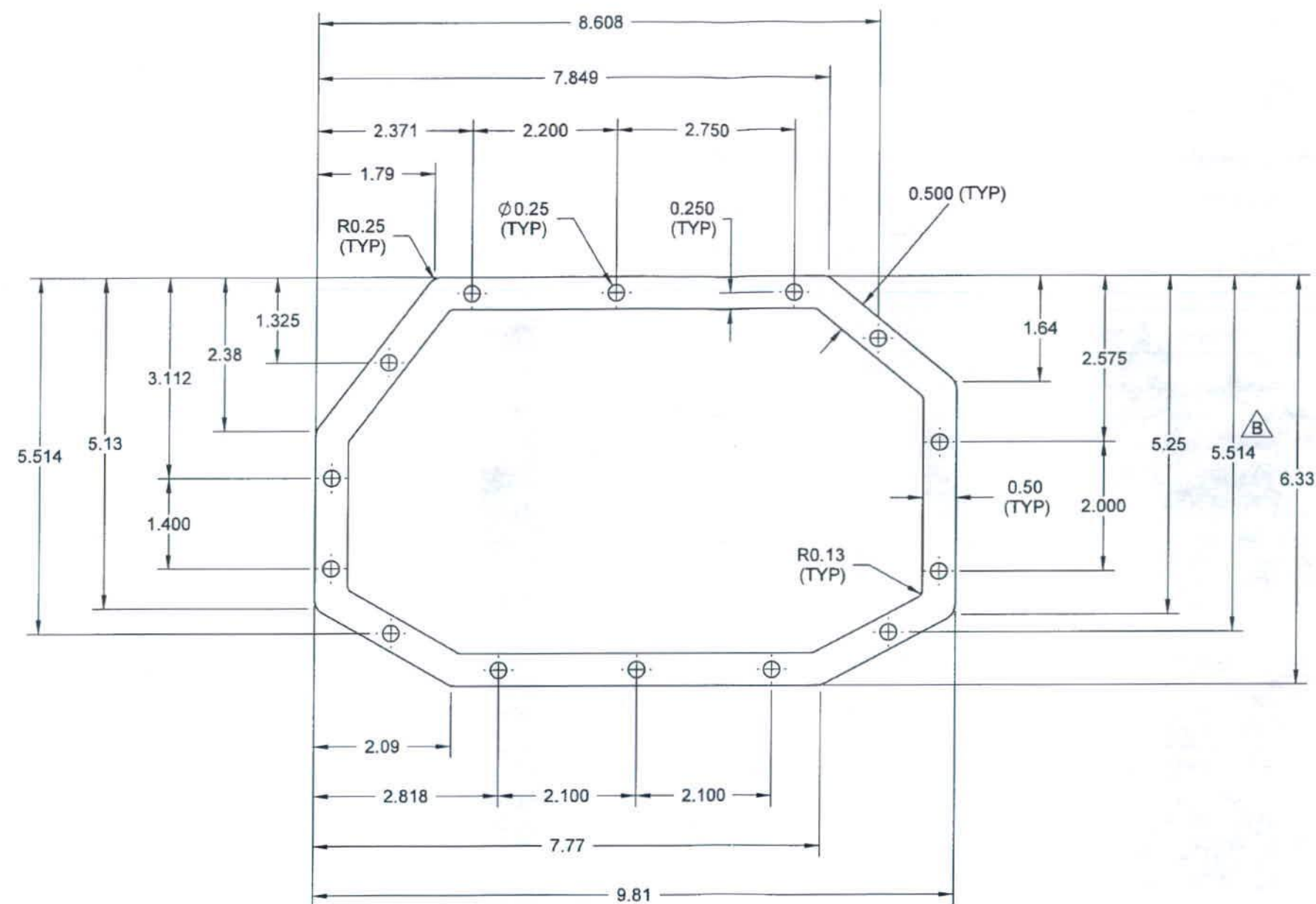


D3651-7 BOTTOM FLANGE BEND DETAIL
(MAKE FROM D3651-7F FLAT PATTERN) B

08-03-27 *MS*

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MFG. APPR.	<i>MS</i>	D3651	SHEET 6 OF 9
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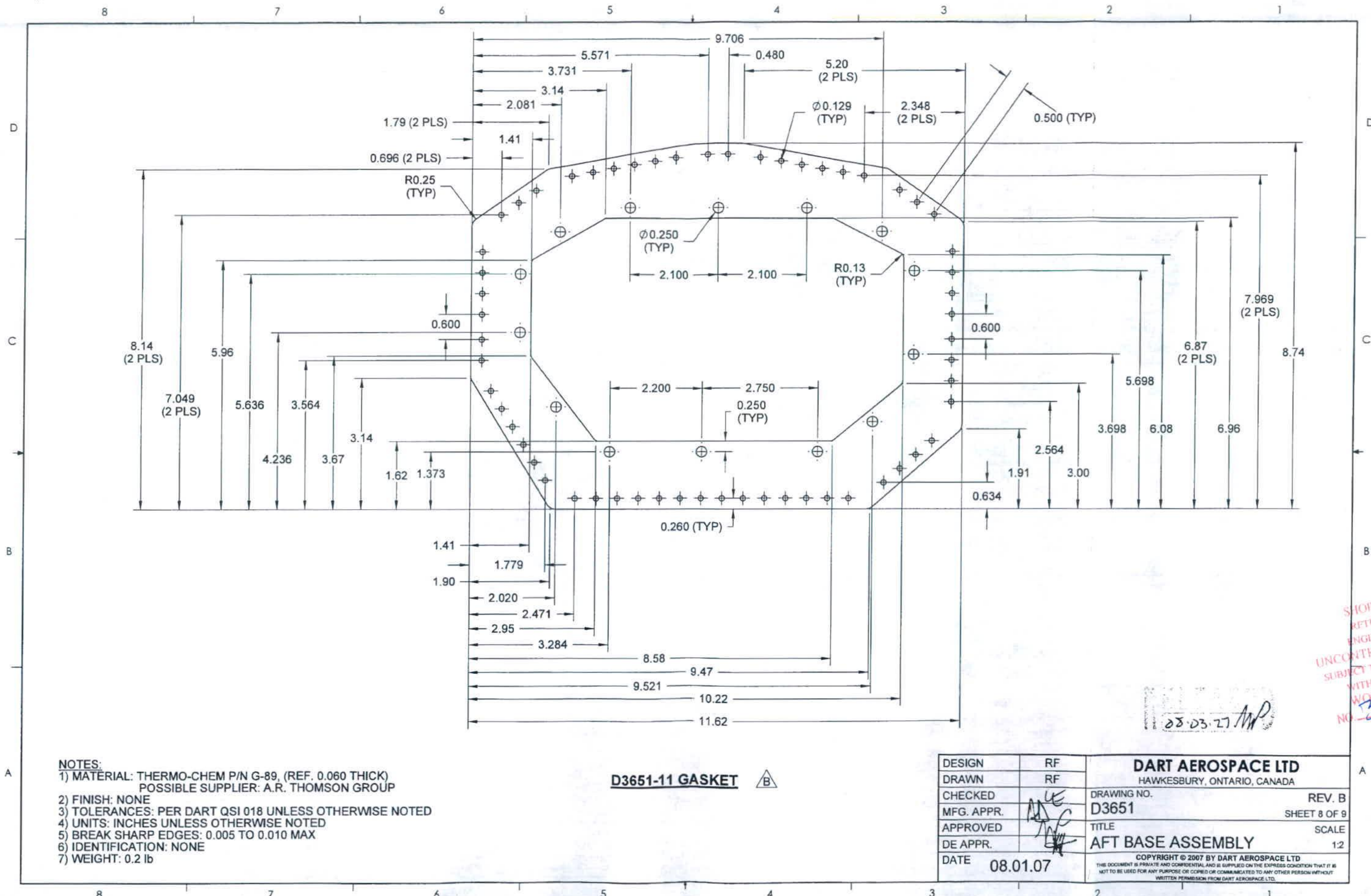
D3651-9 INSIDE DOUBLER

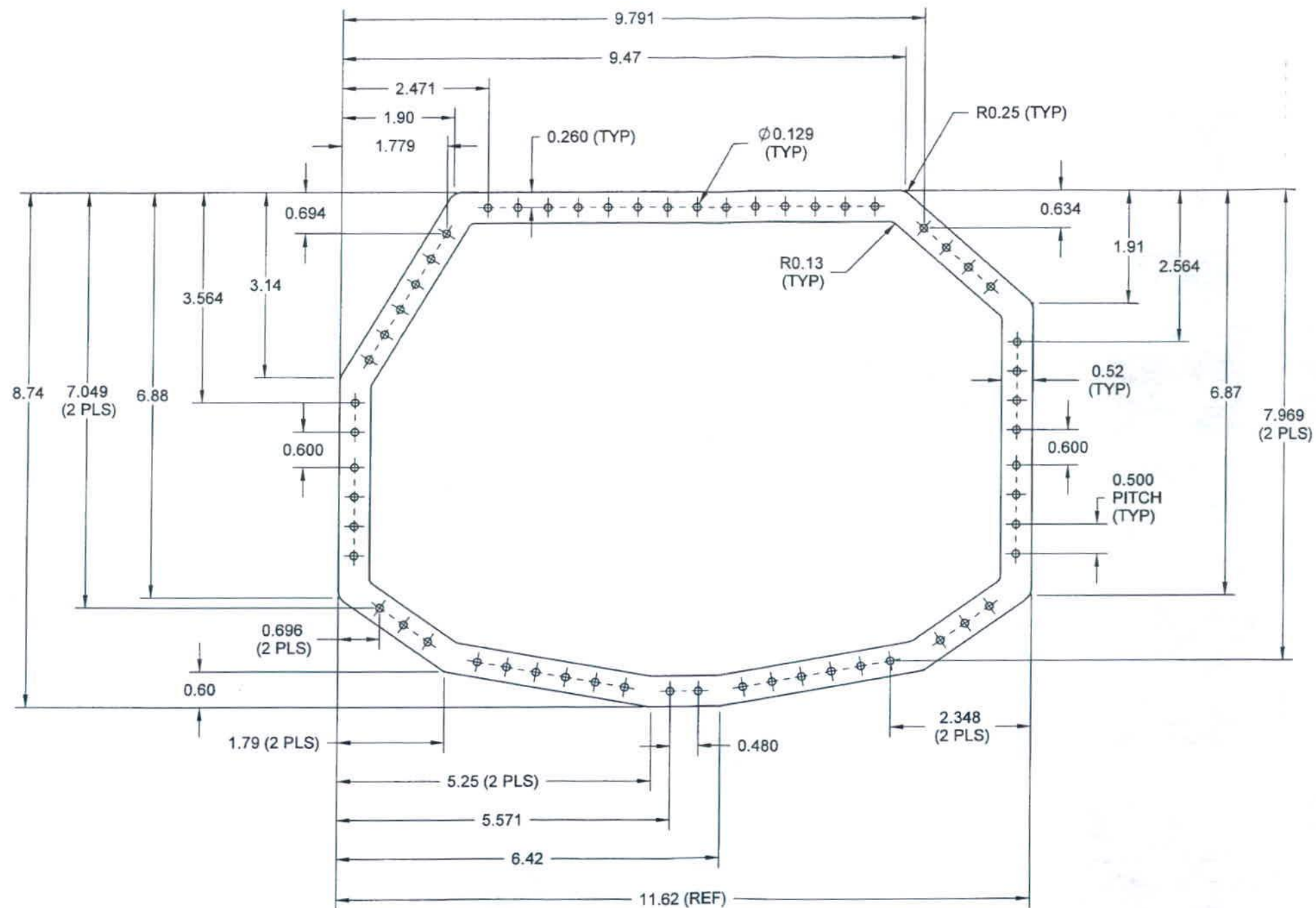
NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.07 lbs

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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D3651-13 OUTSIDE DOUBLER

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.10 lbs

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. D3651	REV. B
MFG. APPR.		SHEET 9 OF 9	
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